#### **Software Maintenance Release Note**

## **Version 281-01**

# for AR700, AR415S, AR450S and AR44x series routers, and AT-8600, AT-8700XL, Rapier i, AT-8800, AT-8900, x900-48, AT-9900, and AT-9800 series switches

This software maintenance release note lists the issues addressed and enhancements made in Maintenance Version 281-01 for Software Version 2.8.1. Version details are listed in the following table:

Models	Series	Release File	Date	Size (bytes)	GUI file
AR415S, AR440S, AR441S, AR442S, AR450S	AR400	54281-01.rez	26 July 2006	4672392	415s_281-01_en_d.rsc
					440s_281-01_en_d.rsc
					441s_281-01_en_d.rsc
					442s_281-01_en_d.rsc
					450s_281-01_en_d.rsc
AR750S, AR770S		55281-01.rez	26 July 2006	3934152	750s_281-01_en_d.rsc (AR750S)
AR725, AR745	AR7x5	52281-01.rez	26 July 2006	3999360	725_281-01_en_d.rsc
					745_281-01_en_d.rsc
AT-8624T/2M, AT-8624PoE, AT-8648T/2SP	AT-8600	sr281-01.rez	26 July 2006	2249768	sr24_281-01_en_d.rsc
AT-8724XL, AT-8748XL	AT-8700XL	87281-01.rez	26 July 2006	2292712	8724_281-01_en_d.rsc
					8748_281-01_en_d.rsc
Rapier 24i, Rapier 48i, Rapier 16fi	Rapier i	86281-01.rez	26 July 2006	4417996	r24i_281-01_en_d.rsc
					r16i_281-01_en_d.rsc
					r48i_281-01_en_d.rsc
AT-8824, AT-8848	AT-8800	86281-01.rez	26 July 2006	4417996	8824_281-01_en_d.rsc
					8848_281-01_en_d.rsc

Models	Series	Release File	Date	Size (bytes)	GUI file
AT-8948, x900-48FE, x900-48FE-N	x900-48	89281-01.rez	26 July 2006	4786652	-
AT-9924T, AT-9924SP, AT-9924T/4SP	AT-9900	89281-01.rez	26 July 2006	4786652	9924_281-01_en_d.rsc
AT-9812T, AT-9816GB	AT-9800	sb281-01.rez	26 July 2006	3865056	9812_281-01_en_d.rsc 9816_281-01_en_d.rsc

Caution: Using a maintenance version on the wrong model may cause unpredictable results, including disruption to the network.

This maintenance release note should be read in conjunction with the **Release Note for Software Version 2.8.1**.

**Caution:** Information in this release note is subject to change without notice and does not represent a commitment on the part of Allied Telesis Inc. While every effort has been made to ensure that the information contained within this document and the features and changes described are accurate, Allied Telesis Inc. can not accept any type of liability for errors in, or omissions arising from the use of this information.

## **Enabling and Installing this Release**

To use this maintenance release you must have a base release license for Software Release 2.8.1. Contact your distributor or reseller for more information. To enable this release and install it as the preferred release, use the commands:

```
enable rel=xx281-01.rez num=2.8.1
set install=pref rel=xx281-01.rez
```

where xx is the prefix to the filename, as shown in the table on page 1. For example, to install the release on an AR440S router, use the commands:

```
enable rel=54281-01.rez num=2.8.1
set install=pref rel=54281-01.rez
```

Levels 3

## Levels

Some of the issues addressed in this Maintenance Version include a level number. This number reflects the importance of the issue that has been resolved. The levels are:

- **Level 1** This issue will cause significant interruption to network services, and there is no work-around.
- **Level 2** This issue will cause interruption to network service, however there is a work-around.
- **Level 3** This issue will seldom appear, and will cause minor inconvenience.
- **Level 4** This issue represents a cosmetic change and does not affect network operation.

## Features in 281-01

Software Maintenance Version 281-01 includes the resolved issues and enhancements in the following tables. In the tables, for each product series:

- "Y" indicates that the resolution is available in Version 281-01 for that product series.
- "-" indicates that the issue did not apply to that product series.

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012654	Switch	1	If an AT-9924SP had a large number of SFPs installed and had a very high level of traffic passing through the network, sometimes newly inserted SFPs were not detected.  This issue has been resolved.	-	-	-	-	-	-	-	ı	Y	ı
CR00012715	DHCP	1	In some configurations in which the DHCP server was enabled, the router or switch compacted its flash memory frequently. This occurred because the DHCP server unnecessarily updated record files in flash memory even if the record had not changed.  This issue has been resolved, so that DHCP records are only updated when necessary. Note that if the router or switch has NVS memory, it stores DHCP records in NVS by preference, instead of in flash memory.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ
CR00012760	Log	1	Entering the command <b>show debug</b> caused the router or switch to reboot if one or more long messages existed in the log.  This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Υ	Υ	Υ

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012933	Switch	1	When STP is enabled on the switch but is disabled for a trunk (by using the command <b>disable stp port</b> ), the trunk should pass traffic. Previously, some trunk members sometimes stayed in the "discarding" state instead.  This issue has been resolved.	-	-	-	-	-	-	-	Y	Y	-
CR00013025	DVMRP	1	Receiving a DVMRP Graft or Prune message occasionally caused the router or switch to reboot.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Υ	Y	Y
CR00013413	IP Gateway, Load Balancer	1	If the router or switch was configured with a local interface IP address and the interface to which this address belonged did not have a logical interface with index 0, a number of connectivity issues from this router or switch occurred, in which the router or switch was not able to communicate with UDP, TCP or PING. This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Y	Υ	Y
CR00013666	SSL	1	When the router or switch used SSL to process HTTPS traffic, it rebooted.  This issue occurred, for example, when browsing securely to the GUI, or when the load balancer was configured to support HTTPS traffic.  This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00009212	Bridge	2	The Bridge cannot be configured to bridge PPPoE packets from an Ethernet interface that has also been configured as a PPPoE interface. Previously, such a Bridge configuration would appear to succeed. However the Bridge would not bridge PPPoE packets and the router would restart when the command <b>reset bridge</b> was entered.	Y	Y	Y	-	-	-	-	-	-	-
			This issue has been resolved. Note: if you want to bridge PPPoE packets, do not also configure the router as a PPPoE endpoint (by using the command <b>create ppp=</b> <i>number</i> <b>over=eth</b> <i>x</i> <b>-any</b> ).										
CR00009213	MSTP	2	Because of an MSTP issue, the switch did not always send a BPDU with an agreement flag to its designated bridge, even if the switch was synchronised with the latest spanning tree information from the designated bridge. This prevented the designated port on the designated bridge from making a fast transition to the forwarding state. The result was that the network could take up to two times the "forward delay" time to fully converge.	-	-	-	Y	Y	Y	Y	Y	Y	-
CR00009826	IP Gateway	2	This issue has been resolved.  When a static ARP is deleted, the router or switch sends out an ARP request to attempt to create a dynamic ARP for that IP address. Previously, the router or switch did not process the ARP response correctly and therefore did not add the ARP to its ARP table.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
			This issue has been resolved. When a static ARP is deleted, the router or switch attempts to create a dynamic ARP for that IP address, and will successfully add it to the ARP table if a device responds.										
CR00010513	BGP, IP Gateway	2	BGP did not update its route table when a blackhole route changed in IP. This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Υ	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00011434	File	2	The router or switch sometimes rebooted when copying a very large file (several Mbytes). This issue has been resolved by improving the copy process so that it uses fewer memory buffers.	Y	Y	Y	Y	Y	Y	Y	<b>Y</b>	Y	Y
CR00011670	Switch	2	On x900-48 Series switches, when the switch used a DSCP map to remark packets, it did not mark the packets correctly.  This issue has been resolved.	-	-	-	-	-	-	-	Y	-	-
CR00012364	IPv6	2	For IPv6, if there were multiple equal cost multipath (ECMP) static routes to a destination, and one or more links for the routes became inactive, the inactive route was sometimes still chosen for forwarding. This caused brief data delivery failure to the destination.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Y	Y
CR00012534	IP Gateway	2	If the router or switch received an IP packet that had been sent as an Ethernet broadcast, the router or switch responded as if the packet had been sent to its IP address, even when the packet was destined for a different IP address. In particular, the router or switch processed and responded to ICMP and TCP packets that were sent as Ethernet broadcasts to different IP addresses. These caused the router or switch to send ICMP echo responses or TCP reset packets. This issue has been resolved. Such Ethernet broadcast packets are generally not valid packets, so the router or switch now discards them.	Y	Y	Υ	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012613	Firewall	2	When the WAN load balancer was used with IP NAT (instead of firewall NAT), and an FTP session was established to a server on the public network, the router did not correctly establish a return session. This meant data was unable to flow correctly back from the server, and the router rebooted.  This issue has been resolved.  Note that the WAN load balancer is not designed for use with IP NAT, because IP NATs are not associated with interfaces. Configurations that use an IP NAT cannot vary the global IP address (the <b>gblip</b> parameter) based on the outgoing interface, so the WAN load balancer sends all traffic out with the same source address. Therefore, the return traffic probably comes back via the WAN load balancer resource that is associated with the global IP. The impact is that the WAN load balancer balances the outgoing traffic but not the return traffic.  We recommend using firewall NAT instead of IP NAT with the WAN load balancer.	Y	-	Y	-	-	-	-	-	-	-
CR00012624	VRRP, IP Gateway	2	Under certain network conditions in which VRRP entities become temporarily unsynchronised, the router or switch could receive a gratuitous ARP from a self-elected VRRP master when the router or switch was still the master. This caused the existing master to create an ARP entry that incorrectly redirected packets towards the other VRRP entity even after the other entity had become a slave again.  This issue has been resolved. The router or switch no longer accepts gratuitous ARPs from other VRRP entities while it is still the Master.	Y	Y	Y	Y	Y	Y	Y	Y	~	Y
CR00012683	Switch	2	After the AR770S rebooted, the Port Link/Activity and Duplex/Collision LEDs sometimes did not blink in response to activity and collisions, respectively.  This issue has been resolved. The router detects the problem and recovers from it, if possible. If it cannot recover from the problem, it generates a log message of severity 6, module SWK, type REST, and subtype FAIL. The log message says "An LED error has been detected, please power-cycle the device. If this message appears again, contact your technical support representative for help."	-	-	Y	-	-	-	-	-	-	-

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012697	IPsec, ENCO	2	Decrypting a large IPsec ESP packet sometimes caused the router or switch to reboot.  This issue has been resolved.	Υ	Υ	Υ	Υ	Υ	-	-	-	-	-
CR00012710	Core	2	Soft errors can generate exceptions that would cause the router or switch to reboot. Soft errors are spontaneous changes in the information stored in a digital circuit, caused by physical effects. The router or switch's handling of such errors has been improved, so that it recovers without rebooting when possible.	-	-	Y	-	-	-	-	-	-	-
CR00012741	Core, File, Stack	2	The command <b>create config=filename set</b> did not copy the configuration file to all switches in the stack, but only saved the file onto the current switch.  This issue has been resolved.	-	-	-	Υ	Y	Y	Y	Y	Y	-
CR00012757	OSPF	2	The router or switch correctly accepted the command add ospf redistribution protocol=static followed by the command set ospf asexternal=on or nssa. However, the command create config did not create a valid configuration file from these commands. If the router or switch used that configuration after a reboot, it gave the error "Redistribution for specified routing protocol - already exists" and did not use the user-defined redistribution definition.  This issue has been resolved. The router or switch now correctly saves and uses the user-defined redistribution definition.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00012820	DHCP Snooping, Switch	2	When the switch had two DHCP snooping classifiers applied across all 48 ports, and <b>maxleases</b> was set to 10 or more on each port, the switch rebooted.  This issue has been resolved.	-	-	-	-	-	-	-	Υ	-	-
CR00012821	IP Gateway	2	When adding, deleting or updating subnet routes of a more general route, the software and hardware IP route tables sometimes became unsynchronised. The same issue sometimes also occurred when updating ECMP routes. This could cause the router or switch to forward packets to unexpected next hops.  This issue has been resolved.	-	-	-	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012846	ASYN, Log	2	The following issues occurred with sending log messages to an asynchronous port:  The log messages output on an asynchronous port were corrupt.  When log messages were output to an asynchronous port, that port was	Y	Y	Y	Y	Υ	Y	Υ	Y	Y	Y
			(correctly) locked. However, the port remained locked after the asynchronous log output definition was destroyed, and after the log output's destination was changed from asynchronous to something else.										
			■ It was possible for a user to change the log output destination to an asynchronous port while the user was logged into the asynchronous port. This resulted in the user losing access to the command line interface.										
			■ It was possible to create a log output definition with an asynchronous port as the destination even when another user was logged into that asynchronous port. This resulted in the other user losing access to the command line interface.										
			■ If a user changed the log output destination to an asynchronous port and specified invalid parameters in the command, an error message was displayed but the new output destination was saved anyway.										
			■ The <b>set</b> command allowed a user to specify an asynchronous port as the destination without specifying the asynchronous port number. The number defaulted to asyn0, which may not have been the desired port.  These issues have been resolved.										
CR00012855	Core	2	If the switch was rebooted at a time when there was a high level of packet traffic between the switch ports and the switch CPU, then during the reboot process it was possible for RAM test errors to occur.  This issue has been resolved.	-	-	-	-	-	-	-	Y	Y	-
CR00012868	ENCO	2	Entering the command <b>create enco key=number ip=?</b> caused the router or switch to reboot.  This issue has been resolved.	Υ	Υ	Y	Υ	Υ	Y	Y	Y	Υ	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012900	IPv6, Switch	2	When an IPv6 accelerator card was installed, IPv6 multicast traffic was flooded to all ports in a downstream VLAN, whether or not they had joined the multicast group.  This issue has been resolved.	-	-	-	-	-	1	1	Υ	Y	-
CR00012911	Switch, VLAN, User	2	Under very rare circumstances, memory corruption could occur when packets were transmitted by the CPU out a switch port. This issue has been resolved.	Y	-	Υ	-	-	1	1	-	-	-
CR00012951	IPv6	2	RIPng (for IPv6) sometimes sent sub-optimal routes to its neighbours. When RIPng was configured in a network with loop topology, this could cause unstable routing table entries on the neighbours (the metric kept being updated, as a result of updates from neighbours).  This issue has been resolved. RIPng no longer sends sub-optimal routes.	Y	Y	Y	Y	Y	1	1	Y	Y	Y
CR00012952	Bridge	2	If a tagged packet was bridged out of a VLAN interface, the interface always added a VLAN tag into the packet, even though the packet was already tagged. This issue has been resolved.	Y	Υ	Υ	-	-	1	1	-	-	-
CR00012991	ATM	2	The maximum allowed value of the <b>vpi</b> parameter in the commands <b>add</b> and <b>set atm channel</b> has been increased from 8 to 15.	Υ	-	-	-	-	-	-	-	-	-
CR00013003	EPSR, Switch	2	When EPSR is enabled, it creates a classifier so it can send EPSR packets to the CPU for processing. Previously, if too many classifiers existed and therefore EPSR could not create the classifier, EPSR was enabled anyway. However, it did not work correctly.  This issue has been resolved. Now, if EPSR cannot create the classifier, an error message displays and EPSR is not enabled.	-	-	-	-	-	-	-	Y	Y	-

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00013077	IPv6	2	When an IPv6 address was deleted on the router or switch, and that IPv6 address had previously been learnt by a remote IPv6 node, then the router or switch would reboot if it received an ICMPv6 Neighbour Solicitation message from the remote node. This meant, for example, that if you successfully pinged an address on the router or switch, then deleted that address, then attempted to ping the old address again, the router or switch would reboot.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Y	Y
CR00013234	IP Gateway	2	If the router or switch attempted to email log output, and used a domain name server that gave a non-standard response to the DNS query, the router or switch sometimes rebooted.  This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00013276	UPnP	2	In UPnP, Msearch requests were stored indefinitely, which eventually exhausted the router's memory and caused it to reboot.  This issue has been resolved. Msearch requests are now deleted once the router has finished with them.	Y	Y	Y	-	-	-	-	-	-	-
CR00013309	L2TP	2	When an L2TP LAC Client (for example, a Microsoft Windows XP VPN Client) activated an L2TP tunnel to a router or switch that was operating as an LNS, the dynamic PPP interface on the LNS left out the PPP authentication phase.  This also prevented the interface from obtaining an IP address by remote IP assignment from a User Database entry.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Υ	Y
CR00013407	EPSR	2	The switch correctly accepted a changed ring flap time (the commands <b>create</b> or <b>set epsr ringflaptime</b> ). However, if the command <b>create config</b> was used to save the configuration and the switch used that configuration after a reboot, EPSR failed.  This issue has been resolved.	-	-	-	-	-	-	-	Y	Y	-

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00013529	PIMv6	2	When the router or switch used PIM for multicast routing, and an IPv6 multicast client joined a group, then left it, then attempted to rejoin it, sometimes the attempt to rejoin was not successful.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00008766	ттү	3	Editing a text file that consisted of a very large number of lines (approaching or exceeding 30,000 lines) caused the router or switch to reboot.  This issue has been resolved.	Y	-	Y	-	-	-	-	Y	Y	-
CR00011444	Asyn	3	If information was sent to a console (asyn) port that had no cable plugged into it, excessive CPU usage occurred.  This issue has been resolved.	Υ	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00012309	WAN load balancer	3	WAN load balancer performance has been improved, especially through improvements to the session hashing mechanism.	Υ	-	Υ	-	-	1	-	-	-	_

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012468	OSPF	3	An OSPF router or switch could show large numbers of entries in its retransmission lists to certain neighbours under certain conditions (for example, in a congested Frame Relay network). In some cases, the number of items in the list was larger than the number of LSAs in the database.  This issue has been resolved.  Also, a new NRL debugging option has been added to OSPF, to show additions to and deletions from the neighbour retransmission list. To enable NRL debugging, use the command:  enable ospf debug=nrl  Note that this option may generate large amounts of debugging output on a large OSPF network. Use it with care.  To disable NRL debugging, use the command:  disable ospf debug=nrl	Y	Υ	Y	Υ	Y	Y	Y	Y	Y	Y
CR00012598	OSPF	3	In an OSPF NSSA, changing the router ID of the OSPF NSSA ASBR sometimes caused the area border router to behave incorrectly. This issue has been resolved.	Υ	Υ	Y	Y	Y	Υ	Υ	Υ	Υ	Υ
CR00012607	Switch	3	IPv6 multicast routing using the IPv6 accelerator card on an AT-9924T or AT-8948 switch sometimes caused very high CPU utilisation, even though multicast data is switched at wirespeed by the accelerator card.  This issue has been resolved.	-	-	-	-	-	-	-	Y	Y	-
CR00012708	many	3	The command <b>show debug active</b> displays information about currently-active debugging for many modules at once. Similarly, the command <b>disable debug active</b> disables debugging for many modules in a single step.  This Software Version extends the list of modules that these commands act on. They now apply to all modules with debug support, except for DS3, ACC, Q931, SA, SYN, TPAD, and X25C.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012786	IP Gateway	3	When a link that had RIP configured on it went down, so that the router or switch used an alternative route, output from the command <b>show ip route</b> sometimes displayed incorrect information when the link came back up. When the link first comes back up, the route's RIP metric is still 16, so the alternative route is still the "best" route to the target. However, <b>show ip route</b> sometimes displayed a disabled route over the original link, with a RIP metric of 16, as the best route, even though the router or switch correctly used the alternative route. This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00012895	IP Gateway	3	Previously, the router accepted ARP entries with multicast IP and MAC addresses when the MAC disparity feature was disabled. The MAC disparity feature is disabled by default.  The issue has been resolved. The router now discards such ARP entries unless the MAC disparity feature has been enabled by using the command <b>enable ip macdisparity</b> .	Y	Y	Y	-	-	-	-		-	-
CR00012947	Log	3	When a user entered the command <b>show log receive=</b> <i>ipadd</i> <b>mask=</b> <i>mask</i> , the router or switch displayed an error message that said <b>mask</b> was not a valid parameter.  This issue has been resolved. The <b>mask</b> parameter is now valid for this command.	Υ	Υ	Y	Y	Y	Υ	Υ	Y	Y	Y
CR00013007	IPsec	3	With tunnel-mode IPsec, the router or switch decremented the time to live (TTL) of IP packets twice when it forwarded the packets through the tunnel.  This issue has been resolved.	Y	Υ	Υ	Υ	Y	-	-	-	-	-
CR00013048	Firewall	3	When IP NAT or firewall NAT was used, the router or switch sometimes generated ICMP messages that specified the wrong source IP address. This meant that the response to traceroute could be incorrect.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	-	-	-

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00013049	IPv6	3	The router or switch sometimes rebooted when it processed a large number of multicast routes that were created as the result of receiving a large amount of data from more than 500 multicast groups.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Y	Y
CR00013085	OSPF	3	A user can configure a range on an OSPF ABR, so that the ABR aggregates the network advertisements from one area into another area in the form of summary LSAs. However, networks advertised into a transit area should not be aggregated into summary LSAs. Previously, the router or switch advertised aggregated summary LSAs into transit areas when a range had been configured.  This issue has been resolved. When the router or switch is advertising into a transit area, it ignores any configured range.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Υ
CR00013093	Switch	3	When traffic on a port was mirrored and that port had a learn limit set, packets from the CPU (such as ARP replies and ICMP replies) were not always mirrored. This issue has been resolved.	-	-	-	Y	Y	Y	Y	-	-	-
CR00013190	Core	3	If a AT-8624PoE switch had a sticky fan, the fan constantly toggled between running at full speed and slowing down. This meant that the fan continuously generated alarms.  This issue has been resolved. If the fan reports an error more than 3 times in an hour, it now remains at its maximum speed setting.	-	-	-	-	-	Y	-	-	-	-
CR00013202	Core	3	On the AT-8624PoE switch, a fan fault alarm was not generated when the fan speed dropped to 70% of the expected speed.  This issue has been resolved. When the speed drops to 70% or less, a alarm is now generated.	-	-	-	-	-	Y	-	-	-	-

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00013243	Core	3	The system LED did not indicate when an internal power supply fault occurred.  This issue has been resolved. The system LED now flashes 3 times to indicate a fault. Also, output of the <b>show system</b> command now reports voltages more accurately.	-	-	Y	-	-	-	-	-	-	-
CR00013279	OSPF	3	When a user changed the OSPF priority of an interface, the router or switch did not immediately perform the process to elect a Designated Router and Backup Designated Router (BDR).  This issue has been resolved.	Y	Y	Y	Y	Y	Y	Y	Y	Υ	Y
CR00013353	Switch	3	Certain BIST and AUTOBURNIN tests reported errors, especially if an IPv6 accelerator was installed. Also, if a user entered the commands <b>disable</b> or <b>enable switch learning</b> and an IPv6 accelerator was installed, the switch displayed an error message that said:  "SWI ERROR: (1) swmxMacLearningSet [1] - Unable to set learning"  These issues have been resolved.	-	-	-	-	-	-	-	Y	Y	-
CR00013421	BGP	3	When a user created a BGP module trigger for the <b>peerstate</b> event, the router or switch did not allow specification of the <b>script</b> or <b>state</b> parameters.  This issue has been resolved. All such generic parameters are now available with module-specific triggers.	Υ	Y	Y	Y	Y	-	-	Y	Y	Y
CR00013538	IP Gateway	3	Software Version 2.8.1 introduced a new <b>msgtype</b> parameter for the command <b>add igmp filter</b> , which enables users to filter on IGMP query, report or leave messages. This parameter was mistakenly made compulsory. Therefore, if an existing configuration script contained IGMP filters, and the router or switch restarted with that configuration, the filters did not work.  This issue has been resolved. The <b>msgtype</b> parameter is now optional, with a default of <b>report</b> .	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00010159	GUI	4	When the web-based GUI is used to add or remove ports from a port-based VLAN association on an AT-9812T switch, the icons representing alternate ports faced opposite directions.  This issue has been resolved. The port icons now all have the same orientation.	-	-	-	-	-	-	-	-	-	Y
CR00011311	IPsec	4	In output of the commands <b>show ipsec policy</b> and <b>show ipsec policy sabundle</b> , the value for the number of bytes currently used by each SA bundle was sometimes truncated.  This issue has been resolved, and both commands now display the correct number. As part of this, output of the command <b>show ipsec policy</b> has been modified so that the expiry limits in bytes and in seconds display on separate lines.  Also, if the <b>expirykbytes</b> parameter of the command <b>create</b> or <b>set ipsec bundlespecification</b> was given a value higher than 4193280, the router or switch instead used a lower value.  This issue has been resolved. If you specify a value above 4193280, the router or switch now displays a warning message and sets the expiry limit to 4193280 kbytes.	Y	Y	Y	Y	Y	-	-	-	-	-
CR00011788	IP Gateway	4	Previously the switch allowed users to specify the <b>tag</b> parameter when creating or modifying a blackhole route with the commands <b>add</b> or <b>set ip route</b> . However, blackhole routes cannot be tagged, so the switch did not apply the tag setting in its saved configuration.  This issue has been resolved. If a command contains both the <b>blackhole</b> and <b>tag</b> parameters, the switch now returns an error message.	-	-	-	-	-	-	-	Y	Y	_

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012270	Remote Telnet	4	The "?" help description for the <b>enable</b> command stated that the parameter <b>rtelnet</b> would "Disable the use of remote telnet to control an asyn port".  This issue has been resolved. The query now states that the command <b>enable rtelnet</b> enables remote telnet.	Y	Y	Y	Y	-	-	-	-	-	-
CR00012581	РРР	4	Output of the command <b>show ppp idletimer</b> did not display the PPP interface name.  This issue has been resolved.	Y	Y	Y	Y	Υ	-	-	Y	Y	Υ
CR00012655	GUI	4	The web-based Graphical User Interface (GUI) did not display software QoS counters.  This issue has been resolved. The counters now display correctly. To access them, select Diagnostics in the left-hand menu.	Y	Y	Y	Y	-	-	-	-	-	-
CR00012755	Install, Stacking	4	If the local command <b>show config dynamic</b> was entered as a host-directed command, the switch gave an incorrect error message.  This issue has been resolved. If you attempt to direct <b>show config dynamic</b> to a host, the switch now responds with the message "Command is local, do not use host direction".	-	-	-	Y	Y	Y	Y	Y	Υ	-
CR00012774	IP Gateway, TCP	4	In an unusual network configuration where the IP subnet on one interface was a subset of that on another interface, it was possible for the results of a trace route to show erroneous information.  This issue has been resolved. A search for an interface using an address within the interface's subnet now finds the most specific match for the address.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00012824	GUI	4	Internet Explorer did not display the switch trunking summary page correctly. If the user selected a trunk group, the radio button displayed a grey image, instead of displaying a black dot inside a circle. This was only a display issue—the GUI acted on the selected trunk group correctly.  This issue has been resolved.	-	-	-	Y	Y	Y	Y	Y	Y	Y

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012916	L2TP	4	When the router or switch was configured as an LNS and received an incoming L2TP call that was associated with a disabled PPP interface, it produced an incorrect log message.  This issue has been resolved.	Y	Y	Y	Y	Y	-	-	Y	Y	Y
CR00012946	Log	4	When a user entered the command <b>show log receive=ipadd</b> , information about all IP addresses was displayed unless the user also entered the <b>mask</b> parameter.  This issue has been resolved. Specifying an IP address without a mask now limits the display to information about that IP address.	Y	Y	Y	Y	Y	Y	Y	Y	Υ	Y
CR00013086	IPv6	4	When the router or switch was running MLD and sent an MLD query packet, it incremented the OutEchos counter instead of the OutGroupMembQueries counter.  This issue has been resolved. To see the OutGroupMembQueries counter, enter the command <b>show ipv6 counter</b> .	Y	Y	Y	Y	Y	-	-	Y	Y	Y
CR00013115	IP Gateway	4	The "?" help description for the <b>fragment</b> parameter of the <b>add ip interface</b> command was unclear.  This issue has been resolved. The query now states that the parameter "Decides if Do Not Fragment is obeyed for IP packet larger than MTU".	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

### **Enhancements**

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012620	Bridge	-	By default, when the router receives a tagged packet on an Eth or VLAN interface and bridges it, the bridge strips out the packet's VLAN tag. This enhancement enables you to set the bridge to instead retain the tag, by using <b>off</b> , <b>no</b> or <b>false</b> in the new command:  set bridge stripvlantag={on off yes no true false}  The default is <b>on</b> . To see whether stripping is turned on or off, use the command: show bridge and check the new <b>StripVlantag</b> entry.	Y	Y	Y	-	-	-	-	-	-	-
CR00012692	L2TP	-	The connection between the router or switch, acting as an LNS, and a third party peer, acting as an LAC, can sometimes fail during PPP link negotiation. Frequent negotiation failures can indicate a compatibility problem between the third party peer and Proxy Authentication responses from the router or switch. With this enhancement, you can now disable Proxy Authentication on the router or switch for situations where the third party equipment is not compatible. Use <b>proxyauth=off</b> in the command:	Y	Y	Y	Y	Y	-	-	Y	Y	Y
			add 12tp ip=ipadd[-ipadd] ppptemplate=031										

CR	Module	Level	Description	AR400	AR7x5	AR750S / AR770S	Rapier i	AT-8800	AT-8600	AT-8700XL	AT-8948 / x900-48	AT-9900	AT-9800
CR00012850 CR00013109	File	-	Previously, a user could delete the preferred software release and the current boot configuration file (by using the command <b>delete file</b> ), without first setting a new preferred release or boot configuration file. Therefore, it was possible to accidentally delete these files, which caused network disruptions if the router or switch restarted. If the router or switch restarted after the user had deleted the preferred release, it booted from the fallback software. Similarly, if the router or switch restarted after the user had deleted the current boot configuration file, it started up with no configuration.  This enhancement ensures that users can no longer delete the preferred software release or the current boot configuration file. If you want to delete the files without specifying new preferred files, first use the commands <b>delete install=pref</b> or <b>set config=none</b> to stop the files from being preferred.	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
CR00012857 CR00011277	Core, SNMP, Stack	-	Stacked devices are now SNMP accessible through a single IP address. The MIB Object stackSnmpHost (at-stack.mib) is used to determine which stacked device is currently responding to SNMP Requests. By setting the value of stackSnmpHost, an SNMP manager can chose any one of the stacked switches to poll. After a new value is set successfully, a new SNMP agent is chosen. On SNMP V1 and V2c operations, the new agent is immediately ready to talk to the manager. On SNMP v3 operations, the manager needs to re-run engine discovery to re-synchronize the agent and manager.  Traps and notifications from stacked devices now include an extra object called hostID, which gives the value of the switch's host ID. This identifies which stacked switch produced the trap or notification.	-	-	-	Y	Y	Y	Y	Y	Y	-
CR00013394	Switch	-	New AT-8600 Series switches are now ROHS compliant (lead free). This enhancement ensured that the new ROHS compliant 1 gigabit uplink ports are fully supported on AT-8648T/2SP switches.	-	-	-	-	-	Υ	-	-	-	-
CR00013584	Core	-	On AT-8624PoE switches, a new 7000 rpm fan is now supported.	-	-	-	-	-	Υ	-	-	-	-